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ABSTRACT

Although the social sciences have become legitimate sources of science news, many journalism instructors of science communication do not believe the social sciences warrant special or required attention in their courses. This is unfortunate, for the social sciences are important enough and different enough to require both their inclusion and "special handling" in science writing courses. As with pure and applied sciences, social science creates a need for news writers to "translate" its terminology; and the relative newness of the discipline creates special challenges to reporters who must sift through data to interpret the most methodologically sound findings. Once journalism teachers recognize the efficacy of including social sciences in their science news writing courses, they can expose their students to the problems and challenges of social science news reporting in the following ways: compare the central issues of daily news stories with current social science research topics; involve local social scientists in class activities whenever possible; have students develop glossaries of social science terms; have students critique local media coverage of science news; have students write science news articles based on original research reports, then compare student work with professional articles based on the same reports; and make students aware of the basic references in the social sciences. (RL)

PUTTING THE SOCIAL SCIENCES INTO SCIENCE COMMUNICATION COURSES

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Putting the Social Sciences Into Science Communication Courses

In the last 15 years, the social sciences,[1] once considered bastard sciences of dubious merit, have become legitimate sources of science news.

The 1960's and 1970's saw the development of major news magazines in the social sciences, including Psychology Today, Human Nature, and Human Behavior. Professional organizations of social scientists reported dramatic increases in the number of mass media reporters attending national conventions. Major news magazines began to run periodic columns on the social sciences. And a number of major newspapers, including the Los Angeles Times and Detroit Free Press, even hired specialized "human behavior" writers. In his study of science news in metropolitan newspapers, Cole (1974) provided empirical support for this rising media interest in the social scienc . He found that social and behavioral science news rose from 4.7% of all science stories in 1961 to 14.8% of all such stories in 1971.

The responses of educators to this phenomenon have been mixed. On the one hand, educators in schools and departments of journalism and communication have developed courses designed to teach students to cope with social data. The emphasis in many "precision journalism" courses, for example, has been on understanding and developing survey data that address social problems. And increasingly, instructors in advanced reporting courses are exposing their students to the often bewildering world of social research and statistics.

On the other hand, there is reason to believe that journalism educators who teach specialized science communication courses have been slow to warm to the social sciences as legitimate sources of science news. In a recent

survey of science news communication instructors, only one of the general science writing instructors in journalism or communication departments used "social science" in their course title (Dunwoody and Wartella, 1977). This could mean, of course, that many of these instructors subsume the social sciences under the more general "science" terms in their course titles, but there is reason to think they may not. Few of the books and magazines instructors say they use in such courses concern themselves with the social sciences. Moreover, in separate studies, Tichenor and his colleagues (1970) and Dunwoody (1978) found that science writers from major newspapers seldom think of the social sciences when they think of science. More often than not, the sciences for them are the physical and biological sciences. Science writers not only prefer to write about the "natural" sciences, but their training is more likely to be in these sciences (Ryan and Dunwoody, 1975). Since many instructors of science communication have themselves been newspaper science writers, it is likely that such perceptions of the "sciences" and preferences for the "natural" sciences carry into the classroom. As one journalist-turned-educator recently put it: "My background is in biochemistry—I'm absolutely hopeless when it comes to the social sciences!" Thus, she said she usually avoids making assignments in the area. Other instructors have told me that they do incorporate the social and behavioral sciences in their courses, but usually as "optional" assignments. Rarely do instructors seem to go out of their way to require assignments in the social and behavioral sciences. They simply don't seem to see the social sciences as important enough (or different enough) to warrant this kind of attention.

As one of a small but growing number of social science writers in the country, I think such reactions are unfortunate. I would argue that the

social sciences are important enough—and different enough—to require "special handling" in science communication courses, and that such handling is not as difficult as it might at first seem, even for instructors with no special training in the social sciences.

First, I would argue that the social and behavioral sciences are significant enough to warrant their coverage in the mass media, and their inclusion in science communication courses. Critics of social science research often contend that the findings of the so-called "human" sciences are so nascent that they are best left to gather dust until conclusions can be more firmly drawn. While it is true that much social science research is in its infancy, it is also true that there is much that has matured to the point where it can be of immediate use to people. Social scientists have made great strides in the last two decades. Economists have found that it is possible to provide secure incomes to the poor without undermining their motivation. Sociologists have found that busing, instead of promoting integration, often promotes "white flight." Demographers have exploded the myth of the American family as a two-parent unit in which Dad goes to the office while Mom develops dishpan hands. Psychologists who study altruism have found that victims stand a better chance of receiving help if they cry "Call the police!" than they do if they simply scream. In addition, we now know that special institutions that label children as "retarded," "handicapped," or "delinquent" may do more harm than good. These findings, and many more, deserve the attention of public policymakers and the general public, and they deserve to be seen as legitimate subjects for science news.

Second, I would argue that science writers, in reporting the findings of social science research, are faced with unique challenges that require

special attention. In some ways, in fact, the social sciences may be more difficult to cover than the physical and biological sciences. The social, emotional, and mental lives of people are more difficult to measure and predict than are the lives of other creatures or the states of most inorganic organisms. Thus, as sociologists of science have pointed out, there is usually less consensus in the social sciences than there is in the natural sciences. For the science writer, this means that his scientist sources may disagree with each other more than they do in the physical and biological sciences. It also means that findings tend to depend more on methodological considerations than do findings in the other sciences. As a result it may be much more difficult for the science writer covering the social and behavioral sciences to separate good data from bad.

At the same time that there is less consensus in the social sciences, there is usually more apparent relevance to people's daily lives. Street crime, which is a subject of sociologists, is simply much more involving for the average person than black holes or supernovas. In my view, this very relevance, while enhancing interest in the subject matter of social science, generates its own difficulties. When it comes to human behavior, everyone is his own expert. If a social scientist's findings on sex differences do not mesh with those of an editor's, they are likely to be dismissed as "bad science." If the findings support common sense, they are likely to be rejected as "supporting the obvious."

In addition, the social sciences are more likely than the natural sciences to borrow terms from everyday language--a fact that may make the subject matter appear to be "understandable" when in fact it is not. "Aggression," for example, may mean one thing to a layperson, but a very different thing to a psychologist. Similarly, "alienation" may have one

meaning to the lay reporter, but a very different meaning to the sociologist. Unless a science writer realizes that the jargon of social science needs "translating" every bit as much as the jargon of medicine or physics, s/he may unintentionally distort the findings of a particular social science study. In fact, there is some evidence suggesting that social science articles are more likely than medical science stories to be misunderstood, perhaps because the jargon of social science is more likely to have multiple meanings (Lium, 1977).

Indeed, in private conversations, several newspaper science writers have acknowledged that they have a more difficult time covering the social sciences than they do covering the physical and biological sciences. "I have no background in the social sciences," one reporter recently lamented, "I can't talk the language." Noted another: "The trouble with social science is that if you put ten different social scientists in the same room and ask them all the same question, you get ten different answers!"

Instructors of science communication cannot be expected to teach psychology or sociology to their students any more than they can be expected to teach biology or physics. However, they can expose their students to some of the problems and challenges that the social sciences have to offer.

Among other things, they can:

• Expose science communication students to the inherent news value of social science research. Behind many breaking news stories about human beings is at least one scientist who is working on a related problem. For example, when a politician claims that welfare undermines recipients' willingness to work, the science writer can see if there's any empirical

basis for such claims; as it turns out, sociological research shows that most welfare recipients, contrary to myth, really do want to work. When school board members argue that corporal punishment is needed to "keep kids in line," the science reporter can explore the psychological evid a matter of fact, social scientists have found that corporal punishme... does at least as much harm as it does good, and that there are alternative, effective methods of disciplining youngsters. One way to expose science communication students to the possibilities for stories in the social sciences is to bring a social researcher into the classroom to discuss the relevance of his field for everyday news events. It might be particularly instructive to bring in a social scientist whose own research findings seem very "commonsensical." The students could interview the scientist on why his or her findings are "important." They could then discuss the scientist's findings with a local newspaper editor and ask if s/he would be interested in running a story on the findings, and why or why not?

- Find social scientists on the university faculty who have recently delivered papers on their research at conventions in their fields. If the scientists are willing, have them present their papers to the class, and share the views that other scientists have taken of their work—particularly in terms of interpretations of data, measurement problems, and the like. If possible, bring in two social scientists who take very different approaches to the same problem.

- Have students develop glossaries of social science terms, with particular emphasis on terms that may appear to be familiar to lay audiences, but which have very definite and different meanings for social scientists.

Have students critique media coverage of science news locally. In their critiques, ask students to keep separate tallies on the social, biological, and physical sciences. Who writes the articles--science writers or general assignment reporters? What was the original form for presentation of the research findings--a public meeting? convention? government report? or journal article? Does the reporter place the research in a larger research context? If possible, have students do accuracy checks with selected scientists. Are there any noticeable differences in the coverage given the social and natural sciences?

Human Behavior[2] and Psychology Today often run news "shorts" on individual journal articles in the social sciences. Select an article from one of these publications and, using the reference cited in the magazine, locate the original journal article on which it is based. Assign students to write a newspaper article based on this original article. Then compare the students' work with the professional journalist's.

Expose students to basic references in the social sciences, including Sociological Abstracts, Psychological Abstracts, The Social Science Citation Index, and ERIC. Tell them about sources that list grants awarded in the social sciences. Foundation newsletters are good sources, but there are others, including Behavioral Research Studies, a monthly publication that routinely lists all federal government grants in the behavioral sciences. In addition, familiarize students with various journals in the social sciences. Local faculty may be of help in locating "prestige" journals; they may also be able to help identify scholarly journals of book reviews, and the "annual reviews," which provide state-of-the-art reviews of research in various disciplines. In her recent book Guide to Writing and Publishing in the Social and Behavioral Sciences (1977), Carolyn

Mullins lists 540 journals in the social and behavioral sciences; her list includes information on topics covered in each journal.

• Expose students to critical discussions of mass media coverage of the social and behavioral sciences. One important source hails from the Arden House Conference on Behavioral Sciences and the Mass Media sponsored by the Russell Sage Foundation and the Graduate School of Journalism of Columbia University in April, 1966; the proceedings of this conference have been edited into a volume by Fredrick T. C. Yu, called Behavioral Sciences and the Mass Media. Another important source, and one that provides an international perspective, are the proceedings of a UNESCO symposium on social science communication, which appeared in a 1974 issue of the in International Social Science Journal. See also Jim Gruning's untitled article on social science and the media, in Science and the Newspaper, published by The American Association for the Advancement of Science in 1974; and a chapter Sharon Dunwoody and I wrote called "Social Science in the Mass Media: Images and Evidence," which will appear in a book titled Ethical Decisionmaking in Social Science Research, soon to be published by Cambridge University Press.

• In addition, encourage students to cover the lectures, speeches, colloquia, and other presentations of social scientists.

In my view, the apparent relative lack of attention that instructors of science communication give to the social and behavioral sciences ought to change, and can change, if educators will but make the effort.

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Footnotes

1. The "social sciences" have been variously defined, but most often they have been taken to mean empirical investigations in the traditional academic disciplines of sociology, psychology, anthropology, economics, political science, and history.

2. Human Behavior folded in May, but back issues may be available in your university library.